

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW RACE OF *MICROTUS MONTANUS* FROM THE
CENTRAL SIERRA NEVADA.

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(Contribution from the Museum of Vertebrate Zoology of the University of California.)

The *montanus* group of meadow mice occupies the northeastern section of California, in the Modoc region west to the vicinity of Mount Shasta, and thence south along the Sierra Nevada to and including the Mount Whitney region. A curious thing in its distribution is that in the northern part of this general area this specific type belongs to a lower life zone than in the southern part. The species appears to tip up zonally from north to south. Material accumulated in the California Museum of Vertebrate Zoology indicates that three subspecies are recognizable, and that typically these belong to three different levels of zonal position. The two extreme races have been named, and it remains to characterize and name the middle-lying form. But this new subspecies, of intermediate position, is not altogether intermediate in characters. Geographic variation in the *montanus* group of meadow mice has already been referred to briefly by Vernon Bailey (N. Amer. Fauna, No. 17, 1900, p. 28).

***Microtus montanus yosemite* new subspecies.**

YOSEMITE MEADOW MOUSE.

Type.—Female adult, No. 12,978, Mus. Vert. Zool.; Yosemite Valley, 4000 feet altitude, Mariposa County, California: May 27, 1911; collected by J. and H. W. Grinnell; Orig. No. 675.

Diagnosis.—Similar to topotypes of *Microtus montanus montanus* (Peale), from Sisson, Siskiyou County, California, but coloration notably paler; less black, more gray. Black hairs dorsally less in proportion, buffy hairs paler, more grayish in tone; feet and tail less blackish, the

latter more distinctly bicolor, dark brown above and dull whitish below; ears smaller than in *montanus* and more hairy.

Material.—Thirteen specimens: 2 (Nos. 11,947, 11,948) from Independence Lake, 7000 feet altitude, Nevada County, taken by A. M. Alexander and L. Kellogg; 7 (Nos. 19,309–19,315) from Cisco, 6000 feet altitude, Placer County, taken by J. Grinnell and F. H. Holden; 4 (Nos. 12,975–12,978) from Yosemite Valley, 4000 feet altitude, Mariposa County, taken by J. and H. W. Grinnell. All these localities are in high Transition or Canadian Zone, in the central Sierra Nevada of California, and the mice were trapped in wet meadows. The zonal range of *M. m. montanus*, of northern California, appears not to extend higher than low Transition, while that of *M. m. dutcheri* Bailey, of the high southern Sierras in the vicinity of Mount Whitney, extends from Canadian up through Hudsonian.

Measurements.—Of type (old adult female): Total length, 166 mm.; tail, 51; hind foot, 20; basilar length of hensen, 24.7; zygomatic width, 16.2; mastoid width, 12.2; length of nasals, 7.6; height of braincase at bullae, 9.7. Three old males, one from Yosemite and two from Independence Lake, measure, respectively: lengths, 185, 175, 177; tail, 46, 48, 43; hind foot, 21, 21, 21.

Comparisons.—The relatively gray cast of coloration as compared with *M. m. montanus*, obtains also when compared with *M. m. dutcheri*. The latter is much more reddish above, and usually has a buffy wash below, entirely lacking in the other two forms. In size and hairiness of ears *yosemite* is apparently intermediate between *montanus* and *dutcheri*, though the differences here involved are slight. In respect to cranium, *yosemite* as compared with *montanus* seems to have more widely spreading zygomatic arches and more angular braincase. While there seem to be other minor skull differences, there is not available a sufficient series to indicate fully the nature and range of individual and age variations.